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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/051,619	10/29/2001	Colin P. Britton	0103488-00005	9011
21125	7590	02/23/2004	EXAMINER	
NUTTER MCCLENNEN & FISH LLP WORLD TRADE CENTER WEST 155 SEAPORT BOULEVARD BOSTON, MA 02210-2604			ABEL JALIL, NEVEEN	
			ART UNIT	PAPER NUMBER
			2175	20

DATE MAILED: 02/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/051,619

Applicant(s)

BRITTON ET AL.

Examiner

Neveen Abel-Jalil

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 December 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 7, 8, 14-16 and 22-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 22-25 is/are allowed.
- 6) ☒ Claim(s) 1-3, 7, 8 and 14-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6-10, 19.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. The amendment filed on 8 December 2003 has been received and entered. Claims 4-6, 9-13, 17-21 have been cancelled. Therefore, Claims 1-3, 7-8, 14-16, and 22-25 are now pending.
2. Amendment to the specification has been received and acknowledged.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-3, and 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lipkin et al. (U.S. Pub. No. 2002/0049788 A1) in view of Bradford (U.S. Patent No. 6,678,679 B1).

As to claim 1, Lipkin et al. discloses a digital data processing (See page 1, column 2, lines 47-55, wherein "digital data processor" reads on "computer") method comprising:
transforming data from a plurality of databases into resource description framework (RDF) triples (See page 61, column 2, lines 56-67, also see page 69, column 2, lines 54-67, and see page 70, column 1, lines 24-35),

storing the triples in a data store, and

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traversing one or more of the triples in the data store using one or more a adaptive, genetic algorithms in order to identify data responsive to a query (See page 70, column 1, lines 26-37, also see page 70, column 2, lines 42-67, and page 71, column 1, lines 1-18), where the traversing step includes:

Lipkin et al. does not teach performing a plurality of searches on the data store, each search utilizing a different methodology,

comparing results of plural ones of the searches,

discerning from the comparison one of more of the searches that produce better results and re-performing those one or more searches on the data store with any of additional terms or further granularity.

Bradford teaches performing a plurality of searches on the data store, each search utilizing a different methodology (See column 11, lines 29-67),

comparing results of plural ones of the searches (See column 12, lines 16-43),

discerning from the comparison one of more of the searches that produce better results and re-performing those one or more searches on the data store with any of additional terms or further granularity (See column 12, lines 47-67, also see column 13, lines 13-56).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to have modified Lipkin et al. to include performing a plurality of searches on the data store, each search utilizing a different methodology, comparing results of plural ones of the searches, discerning from the comparison one of more of the searches that produce better results and re-performing those one or more searches on the data store with any of additional terms or further granularity.

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have modified Lipkin et al. by the teaching of Bradford to include performing a plurality of searches on the data store, each search utilizing a different methodology, comparing results of plural ones of the searches, discerning from the comparison one of more of the searches that produce better results and re-performing those one or more searches on the data store with any of additional terms or further granularity because having a variety of search retrieval methods to access data from disparity of databases reduces business costs by keeping all data separate and secure and only having access to needed information.

As to claim 2, Lipkin et al. as modified discloses wherein the transforming step includes transforming data from a plurality of databases of disparate variety (See page 73, column 2, lines 34-59).

As to claim 3, Lipkin et al. as modified discloses wherein the data is any of marketing, e-commerce or transactional data (See page 3, column 2, lines 60-67, and page 4, column 1, lines 1-5, also see page 58, column 2, lines 1-14).

As to claim 7, Lipkin et al. as modified discloses wherein the storing step includes storing the triples such that related data from the plurality of databases is represented by uniform resource indicators (URIs) (See page 69, column 2, lines 26-52) in a hierarchical ordering (See page 9, column 2, lines 43-67, wherein the table shows the hierarchical ordering of the URI).

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As to claim 8, Lipkin et al. as modified discloses wherein the RDF triples each have a subject, predicate and object (See page 69, column 2, lines 26-52, also see page 61, column 1, lines 18-39) and wherein the storing step includes storing the triples such that through each triple's object that triple's predicate (See page 69, column 2, lines 26-52) and subject are referenced (See page 61, column 1, lines 18-39).

5. Claims 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lipkin et al. (U.S. Pub. No. 2002/0049788 A1) in view of Bradford (U.S. Patent No. 6,678,679 B1) in view of and further in view of Delcambre et al. (U.S. Pub. No. 2002/0059566 A1).

As to claim 14, Lipkin et al. discloses a digital data processing method for real-time business visibility comprising:

collecting any of marketing, e-commerce and transactional data (See page 3, column 2, lines 60-67, and page 4, column 1, lines 1-5, also see page 58, column 2, lines 1-14) from a plurality of databases (See page 73, column 2, lines 34-59),

storing the RDF triples in a data store (See page 63, column 2, lines 45-51, wherein "data store" reads on "database"),

Lipkin et al. does not teach at least two of the databases are of disparate variety, by applying one or more queries to that plurality of databases, and converting the data collected therefrom in to resource definition framework (RDF) triples.

Delcambre et al. teaches at least two of the databases are of disparate variety, by applying one or more queries to that plurality of databases, and converting the data collected

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therefrom in to resource definition framework (RDF) triples (See pages 6-7, paragraph 0067, also see page 5, paragraphs 0053-0054, and see pages 1-2, paragraphs 0012).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to have modified Lipkin et al. to include at least two of the databases are of disparate variety, by applying one or more queries to that plurality of databases, and converting the data collected therefrom in to resource definition framework (RDF) triples.

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have modified Lipkin et al. by the teaching of Bradford to include at least two of the databases are of disparate variety, by applying one or more queries to that plurality of databases, and converting the data collected therefrom in to resource definition framework (RDF) triples because converting to RDF format is well used in the Internet content field allowing for standardized efficient descriptive language of data storage and retrieval.

Lipkin et al. as modified still does not teach traversing one or more of the RDF triples in the data store using one or more self-adapting generic algorithms in order to identify data responsive to a query, wherein the traversing step includes performing a plurality of searches on the data store, each search utilizing a different methodology.

Bradford teaches traversing one or more of the RDF triples in the data store using one or more self-adapting generic algorithms in order to identify data responsive to a query, wherein the traversing step includes performing a plurality of searches on the data store, each search utilizing a different methodology (See column 11, lines 29-67, also see column 13, lines 49-56, and see column 14, lines 35-48, and see column 15, lines 43-67, and column 16, lines 1-19).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to have further modified Lipkin et al. as modified to include traversing one or more of the RDF triples in the data store using one or more self-adapting generic algorithms in order to identify data responsive to a query, wherein the traversing step includes performing a plurality of searches on the data store, each search utilizing a different methodology.

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have further modified Lipkin et al. as modified by the teaching of Bradford to include traversing one or more of the RDF triples in the data store using one or more self-adapting generic algorithms in order to identify data responsive to a query, wherein the traversing step includes performing a plurality of searches on the data store, each search utilizing a different methodology because having a variety of search retrieval methods to access data from disparity of databases reduces business costs by keeping all data separate and secure and only having access to needed information.

As to claim 15, Lipkin et al. as modified discloses wherein the traversing step further comprises comparing results of one or more of the searches (See Bradford column 12, lines 16-43).

As to claims 16, Lipkin et al. as modified discloses wherein the traversing step further comprises discerning from the comparison one or more of the searches that produce better results and re-performing those one or more searches on the data store with any of additional terms or

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further granularity (See Bradford column 12, lines 47-67, also see Bradford column 13, lines 13-56).

Reasons for Allowance

5. Claims 22-25 are allowed over the prior art made of record.

6. The following is a statement of reasons for allowance:

The prior art of record Lipkin et al. - U.S. Pub. No. 2002/0049788 A1, and Schuetze et al. - U.S. Pub. No. 2003/0074369 A1, and Hsiung et al. -U.S. Pub. 2003/0109951 A1, and Bradford - U.S. Patent No. 6,678,679 B1) does not disclose, teach, or suggest the claimed limitations of (in combination with all other features in the claim), transforming any of marketing, e-commerce and transactional data from a plurality of databases into resource description framework (RDF) triples, where at least two of the databases are of disparate variety, where each triple includes a subject, an object, and a predicate, and where each predicate comprises a uniform resource identification (URI) such that related data from the plurality of databases is represented by URI's in a hierarchical ordering, storing the triples in a data store, and storing expiry data with at least selected ones of the triples, responding to a search performed against the data store, if data requested is not stored in the data store, by applying a query to one or more of the plurality of databases to obtain the requested data, responding to such a search, if the data is stored in the data store and is associated with expiry information indicating that the requested data may have expired, by returning the requested data with a reduced confidence factor, as claimed in claim 22.

Claims 23-25 are allowed over the prior art made of record, because it is dependent from the allowed independent claim 22.

Response to Arguments

6. Applicant's arguments with respect to claims 1-3, 7-8, 14-16, and 22-25 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hansen et al. (U.S. Pub. No. 2003/0014399 A1) teaches method for organizing records of database search activity by topical relevance.


Hussam (U.S. Pub. No. 2003/0050927 A1) teaches a method for location, understating and assimilation of digital documents though abstract indicia.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Neveen Abel-Jalil whose telephone number is 703-305-8114. The examiner can normally be reached on 8:00AM-4: 30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dov Popovici can be reached on 703-305-3830. The fax phone number for the organization where this application or proceeding is assigned is 703-746-7239.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Neveen Abel-Jalil
December 19, 2003


CHARLES RONES
PRIMARY EXAMINER